

Claims

1. (Currently Amended) A distribution device (D) for parts (R) released at the outlet (110) of a storage (100) means, the storage means (100) having a displacement path for said parts (R) in the vicinity of its outlet (110), wherein the distribution device comprises:

an actuating module (200) admitting individual asymmetric parts (R) released by the storage means (100) in to channel (C),

a control module (300) for orienting each part (R) traveling through the channel (C),
and

a suction means (400) arranged to create a drop in air pressure inside of the channel (C) to accelerate a single moving part (R) of the individual moving parts (R) inside of the channel (C) for distribution therefrom.

2. (Currently Amended) The distribution device (D) according to claim 1, wherein a longitudinal axis of said channel (C) is placed in a coaxial manner to an axis of the parts (R).

3. (Currently Amended) The distribution device (D) according to claim 1, wherein said actuating module (200) comprises a first detection means and a movable actuating element (210) located in front of the inlet of the channel (C) and whose displacement to close off the inlet of the channel (C) is controlled by the detection via said first detection means of the intake of a part (R) on the inside of the channel (C).

4. (Currently Amended) The distribution device (D) according to claim 1, wherein said control module (300) comprises a second detection means (310) placed right next to a retractable position retention means (320) of the part (R) inserted into the channel (C),

wherein the absence or presence of a piece of the part (R) from a side of the position retention means (320) where the detection means (310) is located provides information relating to the orientation of the part (R).

5. (Currently Amended) The distribution device (D) according to claim 4, wherein said position retention means (320) comprises a two-prong fork (330) lying on both sides of an axis

of the channel (C) which it obstructs and whose gap determines the diameter of the piece of the part (R) that can pass through the channel (C) and which comes into contact with prongs (330) of the two-prong fork (330).

6. (Currently Amended) The distribution device (D) according to claim 3, wherein the movable actuating element (210) at the inlet of the channel (C), as well as the position retention fork (330), are each actuated by a cylinder type displacement means (211 and 331).

7. (Currently Amended) The distribution device (D) according to claim 1, wherein a vibrating recipient (100) is attached to the device.

8. (Currently Amended) A method for operating a distribution device (D) for parts (R) released at the outlet of a storage means (100), which has a displacement path for said parts (R) in the vicinity of its outlet (110), the distribution device comprising:

an actuating module (200) admitting individual parts (R) released by said storage means (100) in to channel (C), a control module (300) for orienting each part (R) traveling through the channel (C), and a suction means (400) arranged to create an air pressure drop inside of the channel (C) to drive the moving parts (R) on the inside of the channel (C) in a unitary manner by accelerating one of the individual parts (R),

wherein, with the suction means (400) in a running mode and a fork (330) obstructing the channel (C), the method comprises the steps of:

opening the inlet of the channel (C) by retracting a movable element (210), letting the part (R1) under a lower air pressure pass through the inlet of the channel (C);

closing off the channel (C) by returning the movable element (310) when the passing through of the part (R1) has been detected in the channel (C),

detecting the presence or absence of a shank downstream of the fork (330),

retracting the fork (330) so as to let the part (R1) pass through the channel (C),

channeling or not channeling the part (R1) towards the turning means according to the desired orientation of the parts, and

obstructing the channel (C) by means of the fork (330).

9. (Previously Canceled)

10. (Currently Amended) A distribution device (D) for rivets dispensed at the outlet of a vibrating recipient storage means (100), wherein the distribution device comprises

an actuating module (200) admitting individual rivets released by said storage means (100) in to a channel (C),

a control module (300) for orienting each rivet traveling through the channel (C), and
a suction means (400) arranged to create an air pressure drop inside of the channel (C) to drive the rivets on the inside of channel (C) in a unitary manner by accelerating the rivet which is most affected by the air pressure drop.